

Remarks and Arguments

Claims 1-10 are pending in this application. Claims 3, and 7-10 have been withdrawn by the Office as drawn to a non-elected invention. Claims 1, 2 and 4-6 stand rejected as allegedly obvious. Applicant's response to each of the rejections is set forth below.

Restriction Requirement

Claims 3 and 7-10 have been previously withdrawn by the Office as being drawn to a non-elected invention. As a complete reply to the Final Rejection, Applicant cancels claims 3 and 7-10 without prejudice and retain the right to prosecute these claims in a subsequent divisional application.

35 U.S.C. § 103

Claims 1, 2, and 4-6 stand rejected as allegedly unpatentable over U.S. Patent No. 5,680,960 (hereinafter "Keyes") in view of U.S. Patent No. 5,135,485 (hereinafter "Cohen") and further in view of U.S. Patent No. 6, 299,020 (hereinafter "Sudolcan"). Additionally, claim 5 stands rejected in view of the same three references and further in view of U.S. Patent No 4,262,542 (hereinafter "Freund"). The rejections are addressed separately below.

Claims 1, 2, 4 and 6

According to the Office, Keyes discloses all of the structure of claims 1, 2, 4, and 6, however, the Office admits that Keyes fails to disclose a pair of copper electroconductive terminals proximate the fill tube and control means responsive to the capacitance of the conductors for controlling the filling or release of fluid from the reservoir (Office Action, dated April 8, 2005, page 2). The Office believes that Keyes does disclose a pair of optical terminals and a control means responsive to the optical terminals for controlling the filling or release of fluid from the reservoir. The Office alleges that Cohen teaches a fluid sensing system having a pair of electroconductive terminals placed directly on the container. The Office concludes that it would have been obvious for skilled artisan at the time the invention was made to replace the optical sensors of Keyes with the electroconductive terminals taught by Cohen because Sudolcan recognizes that optical sensors can have deficiencies when the material to be

dispensed is less opaque and that electroconductive terminals are more reliable for these types of materials. Applicant respectfully disagrees and thus traverses the rejection.

The Prima Facie Case Requirement

The Patent and Trademark Office (PTO) bears the burden of initially establishing a prima facie case of obviousness. MPEP § 2142. MPEP § 2143 provides the standard required to establish a prima facie case of obviousness. "First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine what the reference teaches. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim limitations."

The motivation to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not the applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). The references must be considered as a whole and must suggest the desirability, and thus the obviousness of making the combination. *Hodosh v. Block Drug Co., Inc.*, 229 U.S.P.Q. 182, 187 n.5 (Fed. Cir. 1986); MPEP § 2141.

The Prima Facie Case Requirement Has Not Been Satisfied

The PTO has not met its burden in the instant case because the cited references do not teach or suggest all of the claim limitations. Moreover, a skilled artisan would not have been motivated to combine the cited references, as the Office suggests.

The References Do Not Teach All of the Claim Limitations

Claim 1, recites in part "a pair of electroconductive terminals proximate either said fill tube assembly or said fluid reservoir . . . an energy source so that current can be passed from one terminal to the other terminal; and . . . control means responsive to the capacitance of said current for selectively controlling said dispensing of fluid from said tube assembly, or said introduction of fluid from said reservoir, or said release of fluid from said reservoir." Claims 2, 4 and 6 depend on claim 1. The Office admits that Keyes does not teach a control means responsive to the capacitance of the conductors for controlling the filling or release of fluid from the reservoir (Office Action, dated April

8, 2005, page 2). Applicant agrees and submits that neither Cohen nor Sudolcan teach this element as required by claim 1. Cohen describes the use of an alarm system coupled to a capacitance detection method. Sudolcan does not teach a capacitance detection method at all. Thus the cited references do not teach or suggest all of the claim limitations. Accordingly, Applicant respectfully submits that the Office has not established a prima facie case of obviousness and therefore requests withdrawal of the rejection.

No Motivation to Combine the References

Applicant notes that the Office points to nothing in either Keyes or Cohen that would motivate a skilled artisan to combine their respective disclosures. Instead, the Office relies solely on Sudolcan as providing the requisite motivation. Applicant believes this reliance is misplaced.

According to the Office, Sudolcan recognizes that optical sensors can have deficiencies when the material to be dispensed is less opaque. The solution Sudolcan suggests, however, does not include a “control means responsive to the capacitance of said current,” as recited in claim 1. Sudolcan’s detection method does not rely on detecting capacitance at all, but rather relies on a first and second electrode, and an electrolyte intermediate for establishing a continuous conducting path between the two (Column 5, line 65-column 6, line 10). The electrodes are placed in the solution (Column 5, line 65-column 6, line 1). Thus, Sudolcan measures direct current. Moreover, detection of fluid levels disclosed by Sudolcan requires both electrical monitoring and photo-detective monitoring of fluid levels (“it is important that the first sensing unit and the second sensing unit be in cooperative engagement with one another. . . . Therefore, linking the first sensing unit in operative engagement with the second sensing unit enables the processor to 130 to detect fluid for any beverage fluid without the necessity of calibration to compensate for beverage fluid opaquenss”) (Column 6, lines 13-25, emphasis added). The skilled artisan faced with the problem of measuring fluid levels after reading Sudolcan would resort to a two step method involving both photodetection and electrical monitoring and thus avoid “the necessity of calibration to compensate for beverage fluid opaquenss.” Nothing in Sudolcan would lead the skilled artisan to rely on capacitance to measure fluid level or to provide

“control means responsive to the capacitance of said current for selectively controlling said dispensing of fluid from said tube assembly, or said introduction of fluid from said reservoir, or said release of fluid from said reservoir,” as recited in claim 1.

Accordingly, Applicant believes Sudolcan would not motivate the skilled artisan to combine the disclosures of the cited references to arrive at the claimed invention.

Neither Keyes nor Cohen provides the requisite motivation to combine the cited disclosures and thus lead the skilled artisan to the claimed invention. As stated above the Office has pointed to nothing in either of these references to suggest that combining their disclosures would be desirable. The Office is reminded that the motivation to combine and the desirability to combine must be found in the references themselves. Because this requirement of the prima facie case has not been satisfied, Applicant submits that the claimed invention is not obvious and thus again requests withdrawal of the rejection.

Claim 4

Claim 4 recites “The fluid dispensing apparatus of claim 2, wherein the electroconductive strips are both made substantially of copper.” The Office admits that Cohen does not teach electroconductive materials made of copper (Office Action, dated April 8, 2005, page 2) and does not allege any other cited reference discloses the use of copper. Nonetheless, the Office alleges that copper is a well known conductor and malleable material and that a skilled artisan would have found using copper obvious. The Office now states that this statement is taken to be admitted prior art because, according to the Office Applicant failed to traverse the statement when it was initially made. Applicant respectfully traverses. The Office is reminded that it is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record. *In re Zurko*, 59 USPQ2d 1693 (Fed Cir. 2001); *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002). There is nothing of record to support the Office’s position regarding the obviousness of using copper. Applicant respectfully calls upon the Office to supply evidence to support its position or alternatively withdraw the rejection.

Claim 5

According to the Office, Keyes in view of Cohen and further in view of Sudolcan disclose all of the limitations of claim 5 except using pulsed current. The Office alleges

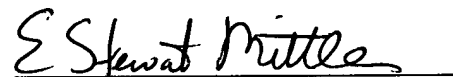
Freund teaches an electroconductive flow meter using pulsed current. Claim 5 depends on claim 1. Applicant notes that Freund does nothing to cure the defects in the prima facie case of obviousness set forth above and thus the same arguments apply to claim 5, as well. Accordingly, Applicant respectfully requests withdrawal of the rejection.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account.

Respectfully submitted

A handwritten signature in black ink, reading "E Stewart Mittler", written over a horizontal line.

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August 3, 2005
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